

Remarks / Arguments

The Final Office Action of January 25, 2006, has been carefully reviewed and these remarks are responsive thereto. By this amendment, the title has been amended to more clearly describe the invention. Claims 1-19 and 25 have been cancelled without prejudice or disclaimer, claims 20-24 have been amended, and claims 26-44 have been added. No new matter has been added. Claims 20-24 and 26-44 thus remain pending in the application. Reconsideration and allowance of the instant application are respectfully requested.

Amendments to the Title

The Office Action objects to the title as not being descriptive. Since Applicant has amended the title to make the title more descriptive, withdrawal of this objection is respectfully requested.

Rejections Under 35 U.S.C. § 103

Claims 1-20

Claims 1-20 stand rejected under 35 U.S.C. §103(a), as being unpatentable over U.S. Patent No. 6,240,084 to Oran et al. (*Oran*) in view of U.S. Patent No. 6,272,131 to Ofek (*Ofek*). Claims 1-19 have been cancelled without prejudice or disclaimer, and it is believed that this rejection is therefore moot with respect to those claims.

Amended claim 20 recites, “scheduling the transmission of the network packets in such a way as to avoid contention in the LAN switch.” As the Office Action correctly states, *Oran* does not disclose scheduling of network packets in such a way that contention is avoided. (Office Action, page 5, lines 9-10). Instead, the Office Action alleges *Ofek* teaches “scheduling the delivery of network packets over the packet network interface with other devices coupled to the packet network in such a way that contention is avoided on the packet network,” at lines 8-14 of the abstract, and “throughout the patent.” (Office Action, page 5, lines 13-17).

However, *Ofek* fails to teach or suggest scheduling “as to avoid contention in the LAN switch,” as recited in claim 20. As is commonly-known in the art, and referred to in the Applicant’s disclosure, contention in a LAN switch is not the same as congestion on the packet

network itself (e.g., on the LAN or WAN). See Specification, paragraphs [0004]-[0005]. For this reason, techniques for avoiding contention on the packet network itself would not necessarily succeed in avoiding contention in a LAN switch shared by multiple data sources (e.g., local transmitters), and vice versa. Thus, although *Ofek* allegedly avoids certain traffic on the packet network, *Ofek* does not disclose any techniques which reduce contention in LAN switches. In fact, *Ofek* does not refer to a Local Area Network (LAN) or LAN switch anywhere in its disclosure. Accordingly, Applicant respectfully submits that amended claim 20 is not obvious over the combination of *Oran* and *Ofek*. Amended claims 21-24, and new claims 26-28, which depend from claim 20, are allowable for at least the same reasons, as well as based on the additional features recited therein.

Applicant further notes that *Ofek* only discloses scheduling using synchronized switches. (*Ofek*, column 4, lines 30-35, column 5, lines 19-22). In contrast, the method recited in claim 20 does not rely on switch synchronization, but instead is compatible with both synchronous and asynchronous switches. Additionally, *Ofek* teaches scheduling using a centralized “time assignment controller” (*Ofek*, column 8, lines 43-47), while the method recited in claim 20 is compatible with autonomous scheduling between endpoints negotiating transmission schedules based on exchange maps.

Claims 21-25

Claims 21-25 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Oran*, in view of *Ofek*, and further in view of U.S. Patent No. 6,611,519 to Howe (*Howe*). Claim 25 have been cancelled without prejudice or disclaimer, and it is believed that this rejection is therefore moot with respect to that claims. With respect to claims 21-24, since *Howe* also fails to teach, “scheduling the transmission of the network packets in such a way as to avoid contention in the LAN switch,” as recited in claim 20, the addition of *Howe* fails to overcome the deficiencies of *Oran* and *Ofek* previously discussed. Accordingly, dependent claims 21-24 are allowable at least for similar reasons claim 20, as well as based on additional features recited therein.

Applicant further submits that the alleged combination of *Oran* and *Ofek* with *Howe* is improper. The Office Action states that it would have been obvious to combine the references because, “Oran, as modified, and Howe are analogous art because they are from the same field of endeavor of packet communication for time and delay sensitive data.” (Office Action, page 11, lines 17-18.) However, the Office Action then acknowledges at page 11, line 20, that *Howe* discloses a “layer 1 switching system,” which is by definition a distinct type of network communication from packet-switching. As *Howe* states at column 1, lines 10-15, “The present invention relates in general to network communications switching, and more particularly to synchronizing store-and-forward networks and scheduling real-time or high-priority network transmissions for immediate and direct layer one or physical level switching.” Thus, not only is the alleged combination without motivation, *Howe*’s layer one switching system is physically incompatible with the packet-switching systems of *Oran* and *Ofek*. Accordingly, the Applicant submits that the combination is improper, and respectfully requests withdrawal of the rejections under 35 U.S.C. §103(a).

New Claims

Applicant has added claims 26-44, supported by the specification as filed and by previously filed application Ser. No. 10/697,103, entitled “Endpoint Packet Scheduling System” which is incorporated by reference into the Application. No new matter has been added.

Claim 29 recites a device configured to perform, “scheduling the network packets over the LAN switch in such a way as to avoid contention in the LAN switch that would otherwise occur if the network packets had been processed by separate devices coupled to the LAN switch.” Thus, for at least similar reasons discussed above with respect to claim 20, independent claim 29 is allowable over any combination of the cited references. Dependent claims 30-35, are allowable for at least these same reasons, as well as based on the additional features recited therein.

Claim 37 recites, “[a] system for reducing contention in a Local Area Network (LAN) switch, the system comprising a plurality of devices,” similar to the device of claim 29. Thus, for at least similar reasons discussed above with respect to claims 20 and 29, claim 37 is

allowable over any combination of the cited references. Dependent claims 38-44, are allowable for at least these same reasons, as well as based on the additional features recited therein.


With respect to claim 37, Applicant further notes that the claim recites a system comprising "a plurality of devices," which includes a plurality of CPUs. The Office Action, in rejecting now-cancelled claim 17, failed to identify any portion of the cited references which discloses a system comprising multiple devices or multiple CPUs. (Office Action, page 9, lines 3-9). New claim 37 further recites, "wherein each device is connected to the same LAN switch." Since neither *Oran* nor *Ofek* recites multiple devices connected to the same LAN, claim 37 is allowable for this additional reason.

CONCLUSION

All rejections having been addressed, Applicant respectfully submits that the instant application is in condition for allowance, and respectfully solicits prompt notification of the same. Should the Examiner find that a telephonic or personal interview would expedite passage to issue of the present application, the Examiner is encouraged to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,
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